

NATHANIEL WOODTHORPE

Software Developer - Seeking full-time opportunities

<http://nwoodthorpe.com>

<https://github.com/nwoodthorpe>

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Experience

GitHub - San Francisco, USA **May 2017 - Current**
Software Engineering Intern

- Working on GitHub Classroom, an open source Rails app (<https://github.com/education/classroom>)
- Moved Classroom from REST to GraphQL, resulting in a 10x performance boost on some pages
- Writing a GitHub blog post about the technical implications of replacing REST with GraphQL
- Working on additions to GitHub's GraphQL API

Tinfoil Security - Mountain View, USA **January 2017 - May 2017**
Software Engineering Intern

- Worked on a web-app vulnerability scanner in Ruby and the web interface in Rails
- Created a Chrome extension that records user authentication sequences as a web scanner authentication technique
- Wrote a blog post about the process of developing a testable extension (<http://nwoodthorpe.com/tinfoil>)
- Learned about discovering security vulnerabilities and how to prevent them while developing software

Shopify - Ottawa, Canada **May 2016 - August 2016**
Software Developer Intern

- Worked on Shopify Accounting, a Rails app used by over 5000 businesses
- Generated revenue by leading a team of 3 that launched Shopify's first premium app
- Decreased app support escalations by 25% by identifying common user issues and implementing solutions
- Daily tasks included code reviews, working on features, and beating the full-timers at ping-pong

Projects

Personal Website on a Bash HTTP Server + Go Load Balancer **July 2017**

- Wrote an HTTP web server in Bash and a load balancer in Go
- Server fetches web-pages and assets, handles MIME types, and responds with correct response codes
- Load balancer reverse-proxies to servers specified in config and removes unresponsive servers from pool
- Currently serving requests to <http://nwoodthorpe.com/> running on a DigitalOcean VPS

ShareSpace - A Chat-based File Sharing Service **January 2017**

- Created a web-app in Rails where users can share files and information in public/private chat rooms
- Main objective was to play around with Rails' new web socket implementation, Action Cable
- Supports text messages, images, videos, syntax-highlighted code, and file messages
- Used Heroku to host the app and Amazon S3 to store message content

Find more projects on GitHub

Education

University of Waterloo Bachelor of Computer Science, Co-op (Incomplete) **2015 - 2017**

Skills

Languages/Frameworks: Ruby/Rails, Go, C, C++, Java, Javascript, PHP, Bash, Elixir, Python

Technologies: Git, MySQL, AWS, Unix/Linux, TCP/IP, Heroku/DO, x86 NASM, Computer Hardware, L^AT_EX